

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

|   |   |                      |
|---|---|----------------------|
| In the Matter of                        | ) |                      |
|   | ) |                      |
| Unbundled Access to Network Elements    | ) | WC Docket No. 04-313 |
|   | ) |                      |
| Review of the Section 251 Unbundling    | ) | CC Docket 01-338     |
| Obligations of Incumbent Local Exchange | ) |                      |
| Carriers                                | ) |                      |

**COMMENTS OF GENERAL COMMUNICATION, INC.**

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**COMMENTS OF GENERAL COMMUNICATION, INC.**

On August 20, 2004 the Federal Communication Commission (“FCC” or “Commission”) issued its Order and Notice of Proposed Rulemaking (“Notice” or “NPRM”) in the above-captioned matter<sup>1</sup> to solicit comment on alternative unbundling rules to implement the obligations of section 251(c)(3) of the Communications Act of 1934, (the “Act”) as amended,<sup>2</sup> consistent with the U.S. Court of Appeals for the District of Columbia Circuit’s decision in *United States Telecom Ass’n v. FCC*.<sup>3</sup> General Communication, Inc. (GCI) hereby submits these comments in the above-captioned dockets.

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<sup>1</sup> *In the Matter of Unbundled Access to Network Elements, WC Docket No. 04-313; Review of Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, CC Docket No. 01-338, Order and Notice of Proposed Rulemaking, (Aug. 20, 2004) (Interim Rules Order).*

<sup>2</sup> 47 U.S.C. § 151 *et seq.*

<sup>3</sup> 359 F.3d 554 (D.C. Cir. 2004) (*USTA II*), *pets. for cert. filed*, Nos. 04-12, 04-15, 04-18 (June 30, 2004).

## I. INTRODUCTION AND SUMMARY

In the NPRM, the FCC stated that its actions in this docket are intended to advance its most important statutory objectives including the “promotion of competition and the protection of consumers”.<sup>4</sup> Consistent with these stated goals, and as described herein, GCI urges the Commission to take the necessary steps to ensure that the consumer benefits delivered by competitive choice and innovative products and services continue to be realized. To do so, the Commission must ensure that the significant competitive gains made to date in the local service markets not be lost by promulgating rules that ensure that prior investments made in facilities-based competition are utilized and new investments are encouraged.

Access to loops is a critical component of facilities-based competitive local exchange carrier (“CLEC”) local service offerings, and the Commission has already determined that incumbent local exchange carriers (“ILECs”) must “present requesting carriers with a technically feasible method of unbundled access” to voice-grade loops.<sup>5</sup> To give full effect to this prior—and unchallenged—Commission ruling, GCI urges the Commission to specify two critical aspects of that obligation. First, the FCC should confirm that ILECs must provide a CLEC unbundled access to a voice-grade loop *at the ILEC central office*<sup>6</sup>—anything else relegates the CLEC to access to the subloop. Second, where an ILEC cannot provide a CLEC with unbundled access to a voice-grade loop at the central office, one of the specific alternative “technically

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<sup>4</sup> NPRM at ¶ 1.

<sup>5</sup> See *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, Report and Order, Order on Remand, and Further Notice of Proposed Rulemaking, 18 FCC Rcd 16978 at ¶ 297 (rel. Aug. 21, 2003) (“*Triennial Review Order*” or “TRO”). This paragraph of the *Triennial Review Order* was not challenged in or vacated by *USTA II*.

<sup>6</sup> For this document, GCI’s use of the term “central office” means the location of the host. See Declaration of Emily Thatcher on behalf of GCI (“Thatcher Declaration”) (attached hereto as Exhibit 1) at ¶ 6.

feasible method[s] of unbundled access” is the provision of access to the loop in combination with local switching and related signaling and common transport.

Additionally, GCI’s experience in Alaska is consistent with the analysis of other markets throughout the country, that the record supports a national finding of impairment for DS1s. Likewise, Alaska data also confirms that competitive local exchange carriers (“CLECs”) are impaired without access to high capacity loops and dedicated transport in those markets (*i.e.*, at customer locations and on a route-by-route basis) where competitive alternatives are not available. As GCI’s experience demonstrates, without the availability of alternative competitive facilities, competitive carriers are impaired in the provision of local services. Finally, as demonstrated in GCI’s summary of the batch hot cut data previously presented to the Regulatory Commission of Alaska (“RCA”), the Commission should set default standards for the batch hot cut process to ensure timely conversions of customers to the facilities of competitive carriers and to prevent further impairment to the CLEC. A working batch hot cut process is necessary to ensure stable service for the customer and certainty for the new entrant in its efforts to provision services, regardless of the size of the market served.

## **II. BACKGROUND**

### **A. GCI Provides a Range of Competitive Services Throughout the State of Alaska**

GCI is a diversified telecommunications, information services, and cable television provider operating primarily in Alaska. GCI offers competitive local telephone service along with long-distance service, cable service and high-speed and dial-up Internet access to customers in Anchorage, Fairbanks, and Juneau, competing with Alaska Communications Systems, Inc. (“ACS”), the ILEC. GCI serves both the business and residential markets and has been designated a Competitive Eligible Telecommunications Carrier (“CETC”) for Universal Service

Funds (“USF”) by the RCA, pursuant to §254 of the Act and § 54.201 of the Commission’s rules. In addition to these services, GCI also provides wireless Internet services, telehealth, and school access services to some of the most remote villages in Alaska. In the three largest Alaskan markets – Anchorage, Fairbanks and Juneau – GCI has made a substantial investment of over \$50 million in local telephone services infrastructure including the deployment of switches and fiber.

GCI is also deploying a state-of-the-art IP cable telephony network.<sup>7</sup> Using its substantial investment, GCI provides local telephone services through all of the modes of entry available under the Act: a growing number of customers (particularly in Anchorage) are served entirely with GCI’s own facilities; many customers are served using a combination of unbundled loops procured from the ILEC and GCI’s own multiplexing, switching, transport facilities and DSL equipment; and, when necessary, some customers are served through a combination of the loop, local switching, and common transport UNEs (“UNE Platform” or “UNE-P”) or total service resale.

GCI uses its own facilities whenever possible,<sup>8</sup> and generally serves customers via UNE-P only when it cannot obtain direct access to unbundled loops or as a transition when the ILEC does not process and provision orders for such loops quickly enough. Indeed, even in the case of a facilities-based carrier such as GCI, UNE-P is necessary when ILECs block access to a voice-

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<sup>7</sup> In April 2004, GCI began migrating residential customers in Anchorage to its Digital Local Phone Service (“DLPS”), which is provided using its coaxial cable facilities. Currently, GCI is providing telephony service over its own cable facilities in a number of communities throughout Anchorage with an expectation to migrate between 8,000 and 12,000 of GCI’s Anchorage subscribers to DLPS by the end of 2004. GCI also serves many of its business customer locations in Anchorage directly over its own fiber facilities.

<sup>8</sup> In Fairbanks, GCI serves 26% of its customers via UNE-P. In Juneau, 47% of GCI’s customers are served via UNE-P. Interestingly, as discussed herein, these percentages of UNE customers directly correlates with the number of lines that are otherwise inaccessible because of the ILEC’s deployment of non-multihostable IDLCs.

grade loop either through its network architecture or processes. Absent the availability of UNE-P as a means to access the unbundled loop, as GCI advocates herein, the ILECs will have the wrong incentives to block customer acquisition through UNE-L via loop architecture decisions and provisioning delays.

## **B. Status of the Alaska State Triennial Review Case**

Pursuant to the FCC's *Triennial Review Order*, on November 28, 2003, the RCA initiated its state case to examine several issue surrounding the availability of UNEs pursuant to § 251 of the Act, establishing a schedule for parties to file comments, testimony, reply comments and discovery.<sup>9</sup> In the state proceeding, the RCA determined that access to the following unbundled elements were to be reviewed by the RCA, according to the FCC's impairment standards: DS0 local circuit switching, shared transport (to the extent relevant to the DS0 local circuit switching analysis), the batch cut process applicable to DS0 local circuit switching, and DS3 and dark fiber loops.<sup>10</sup> No party disputed the FCC's findings regarding DS1 loops or dedicated transport.<sup>11</sup>

On April 2, 2004, the RCA stayed its state case, citing, in part, the uncertainty created by the D.C. Circuit's decision in *USTA II*. Subsequently on June 24, 2004, the RCA lifted the stay for the limited purpose of accepting a stipulation between GCI and certain ACS ILEC subsidiaries ACS-F and ACS-AK (ACS Rural ILECs).<sup>12</sup> In the stipulation, ACS Rural ILECs

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<sup>9</sup> *In the Matter of the New Requirements of 47 CFR § 251 Related to FCC Triennial Review Order on Interconnection Provisions and Policies*, R-03-7, Order No.1 (Nov. 28, 2003) (*Alaska TRO Procedural Order*) (attached hereto as Exhibit 2).

<sup>10</sup> *Id.* at 9.

<sup>11</sup> *Id.* at 9- 10. Although originally no party challenged the national impairment finding relative to dedicated transport, during the proceeding the RCA granted ACS' discovery requests relevant to dedicated transport. As such the parties discussed in their comments impairment without access to dedicated transport.

<sup>12</sup> *In the Matter of the New Requirements of 47 CFR § 251 Related to FCC Triennial Review Order on Interconnection Provisions and Policies*, Order Temporarily Lifting Stay and Accepting Stipulation, R-03-7, Order No.7 (Nov. 28, 2003) (attached hereto as Exhibit 3).

agreed to the ongoing provision of UNE-P and other UNEs pursuant to interconnection agreements between the parties for Fairbanks and Juneau.<sup>13</sup> In its decision to continue to stay its state proceeding rather than close the docket entirely, the RCA noted that the “status of various federal UNE policies, and our need to continue to develop the record in this proceeding remain uncertain.”<sup>14</sup> The RCA further reasoned that a continued stay “preserves our opportunity to continue a review if it would aid us in responding to possible future FCC requests for information or a future further notice of proposed rulemaking”.<sup>15</sup>

Prior to the stay, GCI and ACS filed comments, replies, testimony, and discovery responses.<sup>16</sup> GCI provides within these comments a summary of the proceeding and data, so that the Commission can benefit from this information in its own deliberations to set final rules post *USTA II*.

### **III. THE FCC MUST ENSURE CONTINUED AVAILABILITY OF UNE-P AS A REMEDY FOR INACCESSIBLE LOOPS**

In its Notice, the FCC invited parties to comment on certain issues that had been raised since the Commission issued its *Triennial Review Order*.<sup>17</sup> The FCC specifically identified an issue raised by GCI in which it requests that the FCC clarify its rules regarding access to

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<sup>13</sup> *Id.* at 1-2. This stipulation between GCI and ACS does not solve the systemic problem with respect to ACS’ ability to block access to the loop in ACS’ other markets, after expiration of the existing interconnection agreements in Fairbanks and Juneau, or in any new markets that GCI or other CLECs enter.

<sup>14</sup> *Id.* at 2-3.

<sup>15</sup> *Id.* at 3.

<sup>16</sup> GCI had only limited access to ACS’ discovery responses, for most of which ACS requested confidential treatment. GCI strongly objected to ACS’ request, but to address any alleged concerns for confidentiality, offered to sign a protective agreement. This issue was still pending before the RCA when it stayed the proceeding, and has not been resolved.

<sup>17</sup> NRPM at ¶ 11.



customers served by integrated digital loop carrier equipment.<sup>18</sup> This clarification is critical. The Commission has been unwavering in its determination that ILECs must continue to provide access to voice-grade loops. Paragraph 297 of the *Triennial Review Order* makes clear that ILECs must “present requesting carriers a technically feasible method of unbundled access” to a voice-grade loop at the ILEC central office.<sup>19</sup> This portion of the *Triennial Review Order* was not challenged on appeal.

In the *Triennial Review Order*, the Commission identified two possible methods by which ILECs could meet its obligation to provide nondiscriminatory access to an unbundled loop, even if the ILEC had deployed Digital Loop Carrier (“DLC”) system: spare home-run copper loops or Universal Digital Loop Carrier (“UDLC”) systems.<sup>20</sup> The Commission further required that this obligation “may require incumbent LECs to implement policies, practices, and procedures *different from those used to provide access to loops served by Universal DLC systems.*”<sup>21</sup> GCI requests that the FCC further specify the scope of this ILEC obligation in two key respects. First, an ILEC must provide a CLEC unbundled access to a voice-grade loop *in the ILEC central office* to comply with paragraph 297. This means access to the whole loop, rather than a subloop. Second, where an ILEC cannot provide a CLEC access to the unbundled loop as required by TRO paragraph 297, the FCC should specify among the alternative “technically feasible method[s] of unbundled access” is the provision of access to the loop in combination with local switching and common transport.

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<sup>18</sup> *Id.* at n. 38 (citing Letter from Tina M. Pidgeon, Vice President, Federal Regulatory Affairs, GCI, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 01-338 (filed July 1, 2004)).

<sup>19</sup> *Triennial Review Order* at ¶ 297.

<sup>20</sup> *Id.*

<sup>21</sup> *Id.* (*emphasis added*).

GCI prefers to maximize its investment and use its deployed facilities to serve customers without having to rely on the facilities of the ILEC.<sup>22</sup> GCI is in the process of undergoing significant investments to make its cable plant hospitable to quality voice transmissions, such as the addition of new equipment that creates the backbone for service delivery of GCI's cable telephony – the voice gateway, the cable modem termination system, and the broadband telephone interface.<sup>23</sup> ACS' practice of blocking access to GCI customers through network architecture decisions, however, not only impedes GCI's use of its existing deployed facilities, but threatens GCI's ability to build and maintain the customer base necessary for complete transition to its own network—the path to full facilities-based competition envisioned under the 1996 Act and by this Commission.<sup>24</sup> Consistent with this vision, GCI prefers access to ILEC loops without unbundled local switching, so that GCI can use its own self-deployed switching and transport facilities to provide services to its end user customers.<sup>25</sup> Because this investment is sunk and the incremental costs of adding traffic to its own switches and transport facilities is negligible, GCI has the incentive to use its own switches and transport wherever it can.

Problems arise, however, when an end user customer's loop is provisioned through a remote

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<sup>22</sup> See Thatcher Declaration at ¶ 3.

<sup>23</sup> Specifically, the voice gateway translates between traditional circuit switching using a GR303 interface and the IP packet network. The DOCSIS standard cable modem termination system ("CMTS") places IP packets on an RF carrier. The broadband telephone interface ("BTI"), a new piece of hardware located at the customer premises, is an intelligent device used to connect the network to the inside wire.

<sup>24</sup> See *e.g.* *Interim Rules Order*, Separate Statement of Chairman Michael K. Powell ("I believe government policy should encourage intermodal and intramodal facilities-based competition. \*\*\* It allows a competitor to control more of its costs, and thus offer consumers potentially lower prices. A facilities competitor is less dependent on its major competitor for its service—an unenviable position for any competitor. And, a facilities competitor helps create vital redundant networks that can serve our nation if other facilities are damaged by those hostile to our way of life. Facilities competition is real competition and it is emerging everywhere."). See also *Interim Rules Order*, Separate Statement of Kathleen Q. Abernathy ("This [*Interim Rules*] Order and Notice of Proposed Rulemaking represent an important step along the road to sustainable, facilities-based competition.").

<sup>25</sup> Thatcher Declaration at ¶ 6.

terminal (including Integrated Digital Loop Carriers or “IDLCs”) that lacks multi-hosting functionality (also known as GR-303 capability) or when the remote terminal is not part of a UDLC system. In this case, access to the unbundled loop is denied without an alternative method of access. For this reason, the Commission should specify that unbundled loops, in combination with unbundled switching and transport, is a technically feasible alternative method of access, and must be made available in the absence of any other alternative.

#### **A. ILEC Loop Architecture**

Generally, CLECs gain access to ILEC loops by cross-connecting their transport facilities so that they can backhaul traffic from the ILEC loop to the CLEC switch.<sup>26</sup> Often, this cross-connection occurs at a collocation arrangement in the ILEC central office. However, many ILECs have designed their networks and deployed equipment to make it impossible for a CLEC to gain access to traffic from the loops serving its customers at the central office, because the traffic cannot be segregated from the ILEC’s customers’ traffic.<sup>27</sup>

As the Commission explained in the *Triennial Review Order*, ILECs generally serve their retail customers using one of two loop architectures.<sup>28</sup> First, the customer may be served by a “home run” copper loop that creates a direct, dedicated analog connection over a single cable pair between the customer’s network interface device and the ILEC central office main distribution frame (“MDF”).<sup>29</sup> Originally, all ILEC retail customers were served via home run copper loops. CLECs can access an unbundled “home run” copper loop at an ILEC central

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<sup>26</sup> See generally GCI document and diagrams entitled “Accessing Unbundled Loops” (“GCI Diagrams”) (attached hereto as Exhibit 4) (descriptions, diagrams and photos of the ILEC network architecture relevant to the access of unbundled loops).

<sup>27</sup> Thatcher Declaration at ¶¶ 7-8; GCI Diagrams at 4.

<sup>28</sup> See *Triennial Review Order* at ¶ 215.

<sup>29</sup> See *Id.*

office by cross-connecting the loop to the CLEC's facilities rather than to the ILEC's line card and switch.

Second, the customer may be served by a loop provisioned through some form of remote terminal.<sup>30</sup> Under this configuration, "incumbent LECs deploy 'feeder plant' to a centralized location (referred to as a 'remote terminal') where the carrier aggregates 'distribution plant,' i.e., copper cable pairs that are used to serve individual customers."<sup>31</sup> More specifically, copper subloops from the customer premises are connected to the remote terminal, where a remote concentrator converts the analog signal from each loop to digital format and multiplexes the digital signals from individual loops onto a fiber or copper feeder facility, which then transports this traffic back to the ILEC central office. Sometimes – but not always – the remote concentrator is a digital loop carrier system.<sup>32</sup> As the Commission itself recognized almost five years ago, "[t]he use of DLCs varies by telephone company and typically ranges from almost zero to as much as 30 percent of the local loops within a given ILEC's network," percentages that have likely increased as the ILECs have upgraded their networks to provide broadband services.<sup>33</sup>

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<sup>30</sup> See generally Thatcher Declaration at ¶ 9; GCI Diagrams at 5.

<sup>31</sup> See *Triennial Review Order* at ¶ 216.

<sup>32</sup> A remote concentrator "has absolutely none of the intelligence required to switch calls or provide feature service, even within its own geographic domain," unlike a DLC system, which does have this capability. See NEWTON'S TELECOM DICTIONARY, 671 (19<sup>th</sup> ed. 2003). In other words, DLCs are a "smarter," more advanced subclass of remote concentrators that perform line concentration *and* some call processing functions. Throughout these Comments, GCI will use the generic term "remote terminals" to refer to both remote concentrators and DLC systems. See also Thatcher Declaration at ¶ 10; GCI Diagrams at 2.

<sup>33</sup> *Ameritech Corp., Transferor, and SBC Communications, Inc. Transferee, For Consent to Transfer Control of Corporations Holding Commission Licenses and Lines Pursuant to Sections 214 and 310(d) of the Communications Act and Parts 5, 22, 24, 25, 63, 90 95 and 101 of the Commission's Rules*, Memorandum Opinion and Order, 14 FCC Rcd 14712 (¶ 197, n.357) (rel. Oct. 8, 1999) ("*Ameritech Merger Order*").

Some remote terminal arrangements permit a CLEC such as GCI to access traffic from its unbundled loops at the ILEC central office, while others do not. A UDLC system, for example, incorporates a Central Office Terminal (“COT”) that “reverses the [remote terminal] functions, *i.e.*, it “demultiplexes from multiplexed [] formats to individual DS-0s, converts these DS-0s to analog formats, and transmits the analog signals on copper pairs connected to the switch via the Main Distribution Frame.”<sup>34</sup> So long as the COT is located in the ILEC central office, and signals are not otherwise re-concentrated prior to reaching the MDF, a CLEC can access these loops in the same manner as “home run” copper loops.

Another type of remote terminal arrangement that allows a CLEC to gain access to its customers’ traffic at the ILEC central office is an Integrated Digital Loop Carrier or IDLC that supports “multi-hosting” at the remote terminal under the GR-303 standard.<sup>35</sup> In an IDLC arrangement (unlike a UDLC arrangement) the COT is “built, or integrated into the switch, and there is no conversion from DS-0 to analog format (as occurs in an UDLC system).”<sup>36</sup> But when multi-hosting capability is present, the remote terminal places traffic from the CLEC’s unbundled loops onto feeder trunks separate from those used to handle traffic from the ILEC’s

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<sup>34</sup> *Petition of WorldCom, Inc. Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia State Corporation Commission Regarding Interconnection Disputes with Verizon Virginia Inc., and for Expedited Arbitration; Petition of AT&T Communications of Virginia Inc. Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia Corporation Commission Regarding Interconnection Disputes With Verizon Virginia Inc.*, Forfeiture Order, 18 FCC Rcd 17722, 17840 (¶ 305, n.786) (Wireline Competition Bureau) (rel. Aug. 28, 2003) (“*Virginia Arbitration Pricing Order*”) affirmed in relevant part by Memorandum Opinion and Order, 19 FCC Rcd 1259 (Wireline Competition Bureau) (rel. Jan. 29, 2004). See also Thatcher Declaration at ¶ 11 and GCI Diagrams at 2.

<sup>35</sup> This is also referred to as being “GR-303 capable.” GR-303 is a set of technical specifications from Telcordia for next generation IDLC systems. Among other attributes, GR-303 provides “multiple interface groups (IGs), so that the remote equipment can simultaneously interface to multiple switches.” See NEWTON’S TELECOM DICTIONARY, 360, 361 (19<sup>th</sup> ed. 2003).

<sup>36</sup> *Virginia Arbitration Pricing Order*, 18 FCC Rcd at 17841 (¶ 305, n.786).

customers. The CLEC can then cross-connect to these dedicated feeder trunks at the central office, and transport the traffic to its own switch for processing.

Significantly, however, other types of remote terminals do not permit a CLEC to gain access to its unbundled loop traffic at the ILEC central office. Older IDLCs and simple concentrators, for example, do not support multi-hosting.<sup>37</sup> Traffic on loops served by those IDLCs cannot be segregated onto separate feeders, and thus can only be separated from the ILEC's traffic after the traffic has been processed by the ILEC's switch. The same is true of any Next Generation Digital Loop Carrier ("NGDLC") system for which the ILEC has not chosen to incorporate GR-303 capability.<sup>38</sup>

When a CLEC cannot gain access to its customers' traffic at the ILEC central office, there are only two means by which it could conceivably serve its customers.<sup>39</sup> First, it may be able to collocate at the ILEC remote terminal – if doing so is technically and operationally feasible, given space constraints. In many instances, however, ILEC remote terminals serve only a small number of loops, making collocation essentially impossible as a practical matter due to the inordinate cost per loop served. Moreover, if this is the *only* means of accessing the

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<sup>37</sup> Thatcher Declaration at ¶ 10; GCI Diagrams at 4.

<sup>38</sup> In the Virginia arbitration proceeding before the FCC, Verizon apparently argued that it was not technically feasible to unbundle a loop provisioned through an NGDLC. *See Virginia Arbitration Pricing Order*, 18 FCC Rcd at 17485-7 (¶¶ 315, 319-321). While GCI cannot comment on Verizon's particular equipment, GCI notes that both GCI and ACS have successfully unbundled loops provisioned through a GR-303-capable IDLC system in Anchorage.

<sup>39</sup> The CLEC can, of course, also build its own loops or purchase telecommunications services for resale pursuant to section 251(c)(4). However, limiting a CLEC only to these two alternatives effectively reads section 251(c)(3) out of the Act in any area in which the ILEC has configured its network in a manner that forecloses CLEC access to unbundled loops. Moreover, this outcome would be inconsistent with sections 251(c)(3) and (d)(2), which require ILECs to provide access to unbundled network elements when the CLEC would be impaired in offering the services it seeks to offer without access to such element.

customer, then the CLEC is denied access to the loop, contrary to the ILEC's obligation to "present requesting carriers a technically feasible method of unbundled access."

The second option is for the CLEC to have unbundled access to the loop, along with those additional elements of the ILEC network necessary to provide service to the customer when the ILEC's network configuration blocks CLEC access to customer traffic via its own switches and other facilities. The Commission should specify that when an ILEC does not provide a CLEC the "direct access" to loops mandated by the *Triennial Review Order*, the CLEC can purchase "indirect access" – that is, the unbundled loop and all other network elements necessary to access that loop, including local switching and common transport or UNE-P. Though this option does not preserve the CLEC's ability to introduce new functionalities that can only be offered through its own switch, it at least will not be denied the ability to serve the customer on a facilities-basis due to the ILEC's chosen network arrangements.

**B. Data in the Alaska State Proceeding Demonstrates the Continued Need for Loop Access Via UNE-P**

GCI's commercial experience in Alaska illustrates the obstacles to loop unbundling that DLC systems can erect. For example, a significant percentage of ACS' loops are provisioned through IDLC systems that lack multi-hosting capability.<sup>40</sup> As a result, GCI cannot access approximately 9 percent of the loops in Anchorage, 29 percent of the loops in Fairbanks, and 50 percent of the loops in Juneau, via its own switching deployed in each market.<sup>41</sup> The testimony

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<sup>40</sup> Thatcher Declaration at ¶ 10.

<sup>41</sup> *Id.* at ¶ 8. The information used in these comments is from 2000. GCI asked ACS for updated information about the make-up of its loop plant in the Alaska *Triennial Review* proceeding. Interestingly, while ACS previously provided this information to GCI, it subsequently claimed in the RCA proceeding that this same information warrants confidential treatment. Based on GCI's knowledge of the market, the percentages provided here are consistent with current loop information. If the Commission desires more current data, then it should direct ACS to file it in the record of this proceeding.

and exhibits from the RCA case confirm that the problem in getting access to the loop because of certain DLC deployments identified by GCI is pervasive and continuing in Fairbanks, Juneau, and Anchorage.

*Fairbanks.* GCI is collocated at the only host switch for Fairbanks at the Globe Central Office. Approximately 37,000 loops are served through the host switch, but as a result of ACS' deployment of remote terminals that do not support direct access to unbundled loops, GCI can access only 17,000 loops via its switching facilities.<sup>42</sup> In addition, GCI is collocated at an ACS' remote terminal, which allows GCI to access approximately 9,000 of the more than 14,000 lines that are homed to this site, leaving an additional 4,787 lines that GCI cannot reach.<sup>43</sup> GCI can access loops served by five different UDLCs through its collocation arrangements, but ACS has rendered other loops inaccessible where it has opted to install IDLCs without multi-hosting functionality.<sup>44</sup> Thus, even with more than \$2.8 million in collocation and switching investment in Fairbanks, the remote terminals in ACS' network foreclose GCI's access to more than 11,000 loops, or approximately 29 percent of the loops in Fairbanks.<sup>45</sup> As part of a recent settlement agreement, however, ACS has agreed to provide, through January 1, 2008, the UNE-P for any unbundled loop that GCI cannot access through its existing collocation sites. Nevertheless, the existence of the agreement does nothing to solve the access to the loop issue beyond the term of the agreement or markets not covered by the agreement.

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<sup>42</sup> Thatcher Declaration at ¶¶ 13-15 and Declaration Exhibits ET-1 and ET-3.

<sup>43</sup> Thatcher Declaration at ¶ 16.

<sup>44</sup> *Id.* at ¶ 15.

<sup>45</sup> *Id.* at ¶ 16.



Exhibit ET-1 is a diagram submitted in the state *Triennial Review* case and confirms GCI's claim of impairment – a pervasive lack of loop access throughout the Fairbanks service area, denying GCI access to approximately 29 percent of the loops.

*Juneau.* GCI is collocated at ACS' central office, which houses the switch serving more than 22,600 loops in the Juneau area. Because of ACS' deployment of remote terminals that do not support direct access to unbundled loops (*i.e.*, remote terminals other than UDLCs and GR-303-capable IDLCs), GCI can only obtain access at the central office (Juneau Main) to about 6,000 loops.<sup>46</sup> To obtain access to additional unbundled loops, GCI also has collocated at an ACS remote switch], thereby gaining access to almost 5,000 of the more than 6,000 lines served there. Included in the loops that GCI can access through its collocations are those served via three different UDLCs, but ACS has rendered other loops inaccessible where it has opted to install devices other than UDLCs.<sup>47</sup> Thus, even with more than \$2 million in collocation and switching investment in Juneau, ACS' remote terminals render it impossible for GCI to access more than 11,000 loops from either of the sites where it is collocated – fully half of the loops.<sup>48</sup> As part of a recent settlement agreement ACS has agreed to provide, through January 1, 2008, UNE-P for any unbundled loop that GCI cannot access through its existing collocation sites at the central office or remote terminal. Again, the agreement does nothing to solve the access to the loop issue beyond the term of the agreement or markets not covered by the agreement.

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<sup>46</sup> Thatcher Declaration at ¶¶ 17-18 and Declaration Exhibits ET-4 and ET-6.

<sup>47</sup> Thatcher Declaration at ¶ 18.

<sup>48</sup> *Id.*

Exhibit ET-4 is a diagram submitted in the state *Triennial Review* case and confirms GCI's claim of impairment – a pervasive lack of loop access throughout the Juneau service area, denying GCI access to approximately 50 percent of the loops.<sup>49</sup>

*Anchorage.* GCI is collocated at each of the five ACS central offices in Anchorage and has collocated at two ACS remote terminals.<sup>50</sup> Unlike Juneau and Fairbanks, GCI can obtain direct access to loops served by many concentrator devices in Anchorage because ACS has primarily deployed IDLCs that support multi-hosting. Nonetheless, GCI estimates that approximately nine percent of the loops in Anchorage are served by devices that foreclose GCI's ability to gain direct access through one of its seven existing collocation sites.<sup>51</sup> The RCA recently denied a request by ACS for reconsideration regarding whether it must continue to provide UNE-P to serve customers with inaccessible loops in the Anchorage market. The RCA made this decision based on the FCC's interim rules that allow CLECs to continue to obtaining UNE-P under existing interconnection rates and terms.<sup>52</sup>

Exhibit ET-7 is a diagram submitted in the state *Triennial Review* case and confirms GCI's claim of impairment – a pervasive lack of loop access throughout the Anchorage service area, denying GCI access to approximately nine percent of the loops.<sup>53</sup> While this is nine percent

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<sup>49</sup> *Id.*

<sup>50</sup> *Id.* at ¶ 19.

<sup>51</sup> *Id.* at ¶ 20.

<sup>52</sup> *In the Matter of GCI Communications Corp. d/b/a General Communications Inc. d/b/a GCI for Arbitration Under § 252 of Telecommunications Act of 1996 with the Municipality of Anchorage db/a/ Anchorage Telecommunications Utility a/k/a ATU*, Order Denying Reconsideration, Modifying Arbitration Ruling to Comply with the Interim Federal Regulations And Requiring Parties to Jointly File Interconnection Agreement, U-96-89, Order No.49, (released September 30, 2004) (attached hereto as Exhibit 5).

<sup>53</sup> Thatcher Declaration at ¶ 20.

of the total loops, in any area where access to the loop is blocked via a non-multihostable DLC or remote, GCI is denied access in 100 percent of the lines served by such devices.

GCI also believes that a significant number of loops served by the Matanuska Telephone Authority, to which GCI has a pending request for interconnection, are served by non-multihostable DLCs or remotes, raising this same issue. And this situation is not unique to Alaska. Several parties in the *Triennial Review* proceeding described how growing deployment of DLC systems, and IDLC systems in particular, forecloses their access to unbundled loops. The increasing use of remote concentrators and DLC systems in ILEC networks – and the obstacles to loop unbundling that these devices erect – is a long-standing barrier to the development of facilities-based competition. As the Commission acknowledged five years ago in the *Ameritech Merger Order*, “[t]he use of DLCs varies by telephone company and typically ranges from almost zero to as much as 30 percent of the local loops within a given ILEC’s network.”<sup>54</sup> At that time, SBC – the nation’s second-largest ILEC – provided more than 25 percent of its customers’ lines through DLC systems.<sup>55</sup>

During the FCC’s *Triennial Review* proceeding, numerous commenters described the growing deployment of DLC systems, and IDLC systems in particular. For example, Florida Digital Network explained that approximately 90 percent of BellSouth’s access lines in the State of Florida pass through a DLC system.<sup>56</sup> Likewise, McLeodUSA explained that Qwest provides

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<sup>54</sup> *Ameritech Merger Order*, 14 FCC Rcd 14712, 14800 (¶ 197, n.357).

<sup>55</sup> See *Ameritech Corp., Transferor, and SBC Communications, Inc. Transferee, For Consent to Transfer Control of Corporations Holding Commission Licenses and Lines Pursuant to Sections 214 and 310(d) of the Communications Act and Parts 5, 22, 24, 25, 63, 90 95 and 101 of the Commission’s Rules*, Second Memorandum Opinion and Order, 15 FCC Rcd 17521, 17533-34 (¶ 23, n.65) (“*Project Pronto Waiver Order*”).

<sup>56</sup> See Letter from Eric J. Branfman, Counsel for Florida Digital Network, Inc., to Marlene H. Dortch, Federal Communications Commission, CC Docket Nos. 96-98, 98-147, 01-318, 01-321, 01-337, 01-338, 02-33 at 3 (filed Oct. 21, 2002).

approximately 21 percent of its loops in Arizona using IDLC systems.<sup>57</sup> And as the New York Public Service Commission cautioned, “[o]ur concern has been that while today roughly 20% of New York’s customers are served using [DLC] technology, this proportion is likely to increase, perhaps sharply. Without unbundling requirements that realistically allow CLECs or potential competitors reasonable access to remote terminals, customers ... choice of voice providers may be curtailed.”<sup>58</sup> Thus, the increasing deployment of remote terminals as a component of DLC systems threatens the development of local competition using UNE loops nationwide.

### **C. Enforcing the ILEC Obligation to Provide Access to a Voice-Grade Loop**

Importantly, the Commission recognized the unbundling challenges posed by such DLC systems (specifically, IDLC systems) in the *Triennial Review Order*, and as a result, required ILECs to provide CLECs with unbundled access to a voice-grade loop in the ILEC central office through other technically feasible means. In the *Triennial Review Order*, the Commission affirmed the definition of the facilities that constitute the local loop. “Loops in their simplest form are the transmission facilities between a central office and the customer’s premises, *i.e.*, ‘the last mile’ of a carrier’s network that enables the end-user customer to receive, for example, a telephone call or a facsimile, as well as to originate similar communications.”<sup>59</sup> Further, the Commission expressly required ILECs to provide access to the unbundled loop at the ILEC central office: “With respect to providing unbundled access to hybrid loops for a requesting

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<sup>57</sup> Letter from Stephen C. Gray, McLeodUSA, to William Maher, Federal Communications Commission, CC Docket Nos. 01-338, 96-98, 98-147, 02-33 at 9 (filed Dec. 17, 2002); *see also* Comments of AT&T Corp., CC Docket Nos. 01-338, 96-98, 98-147 at 163 (filed April 5, 2002).

<sup>58</sup> Comments of the New York Department of Public Service, CC Docket Nos. 01-338, 96-98, 98-147 at 6-7 (filed April 5, 2002).

<sup>59</sup> *Triennial Review Order* at ¶ 203 (citing *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, First Report and Order, 11 FCC Rcd 15499, ¶ 380 (1996) (“*First Local Competition Order*”)); *see also* 47 C.F.R. § 51.319(a) (“The local loop network element is defined as a transmission facility between a distribution frame (or its equivalent) in an incumbent LEC central office and the loop demarcation point at an end-user premises.”).

carrier to provide narrowband service, we require incumbent LECs to provide an entire non-packetized transmission path capable of voice-grade service (*i.e.*, a circuit equivalent to a DS0 circuit) *between the [ILEC] central office and the customer's premises.*"<sup>60</sup>

The Commission made clear that access to the distribution subloop is not sufficient to satisfy this obligation: "Pursuant to this requirement, competitive LECs will be able to obtain access to UNE loops comprised of the feeder portion of the incumbent LEC's loop plant, the distribution portion of the loop plant, the attached DLC system, and any other attached electronics used to provide a voice-grade transmission path between the customer's premises and the central office."<sup>61</sup> And as the Commission further noted, "Incumbent LECs may elect instead to provide a homerun copper loop rather than a TDM-based narrowband pathway over their hybrid loop facilities if the incumbent LEC has not removed such facilities."<sup>62</sup> Nothing in *USTA II* undermines these conclusions, which were not even challenged by the ILECs.<sup>63</sup>

Moreover, the Commission stressed that loops served out of IDLC systems were not subject to different unbundling rules.<sup>64</sup> To the contrary, an ILEC that has deployed an IDLC in its network is still required to provide unbundled access in the central office to voice-grade loops provisioned through that IDLC. After observing that in many cases, the ILEC could alternatively provide access by means of a spare copper facility or a UDLC, the Commission then directed, "Nonetheless, even if neither of these options [spare copper or UDLC] is available, incumbent

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<sup>60</sup> *Id.* at ¶ 296 (*emphasis supplied*).

<sup>61</sup> *Id.*

<sup>62</sup> *Id.*

<sup>63</sup> See *United States Telecom Ass'n v. FCC*, 359 F.3d 554 (D.C. Cir., March 2, 2004) ("*USTA II*"), stay denied by 2004 U.S. App. LEXIS 11063 (D.C. Cir. June 4, 2004).

<sup>64</sup> *Triennial Review Order* at ¶ 294.

LECs must present requesting carriers a technically feasible method of unbundled access.”<sup>65</sup>

Hence, the ILECs’ obligation to provide unbundled access to the loop function at the central office – as defined as the transmission path from the central office to the customer’s premises – could not be clearer.

#### **D. UNE-P as a Remedy**

Despite this express language, the Commission should specify that the provision of access to the loop in combination with local switching and related signaling, and common transport is among the “technically feasible method[s] of unbundled access,” and indeed, must be provided in the absence of any other identifiable means of accessing the loop in the central office. In GCI’s experience, where an ILEC has not made the network modifications necessary to provide unbundled access to voice-grade loops in the central office, or has not reserved or made available spare homerun copper loops, as required by paragraph 297,<sup>66</sup> access via unbundled elements has been the only technically feasible method available for the ILEC to provide the required unbundled access to the loop. The Commission’s express endorsement now of access to the loop in combination with local switching and related signaling, and common transport as among the “technically feasible method[s] of unbundled access,” would foreclose any ILEC incentive to disrupt access to loops via the installation of inhospitable remote devices and/or to stall the deployment of multi-hostable devices that permit such loop access, and foster continued investment in facilities-based competitive entry. Of course, access to the loop in this

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<sup>65</sup> *Id.* at ¶ 297.

<sup>66</sup> *See, e.g.*, Letter from Frederick W. Hitz, III, General Communication, Inc., to William Maher, Federal Communications Commission, CC Docket Nos. 01-338, 96-98, and 98-147 at 2-7 (filed Jan. 27, 2003) (“*GCI January 2003 Ex Parte Letter*”); Letter from Frederick W. Hitz, III, General Communication, Inc., to William Maher, Federal Communications Commission, CC Docket Nos. 01-338, 96-98, and 98-147 at 2 (filed Nov. 12, 2002).

manner would only be necessary in the event that the ILEC did not provide any other technical means for unbundled access to the loop.

This specification is necessary to ensure that CLEC access to the loop is not denied, forcing CLECs to ever-growing subloop collocations due to the ILEC network architecture. GCI anticipates that ILECs may argue, as ACS did in proceedings before the RCA, that when a customer's loop is served out of an IDLC system that lacks multi-hosting functionality, CLECs should obtain access to the subloop element through collocation at the remote terminal, or in the alternative, serve the customer using total service resale. Even if these were lawful alternatives to providing unbundled access to a voice-grade loop in the central office – which, as the *Triennial Review Order* makes clear, they are not – there are significant shortcomings associated with each.

Collocation at the remote terminal is not a real solution. Remote terminals are not central offices with substantial unused space but are usually small sheds or environmentally controlled outdoor cabinets with no additional space for collocation.<sup>67</sup> As the Commission itself has recognized, collocation at remote terminals is often not possible due to space constraints.<sup>68</sup> Other possible space constraints include lack of capacity on the MDF or lack of space for cross-connection in the housing of the IDLC. The Commission, in fact, recognized similar obstacles to remote terminal collocation in the *Project Pronto Waiver Order*, noting that “in addition to the problem of limited space, competitors seeking to collocate in a remote terminal site may have to

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<sup>67</sup> See GCI Diagrams at 6. See also *Triennial Review Order*, at ¶ 217, n.665 (“Although there are different types of DLC systems, they typically consist of cross-connect and multiplexing equipment that are housed in remote terminals, which are intended to house a limited amount of equipment.”).

<sup>68</sup> *Project Pronto Waiver Order*, 15 FCC Rcd 17521, ¶ 22, n.59 (discussing SBC's assertions about space limitations that restrict the amount of equipment that can be installed at its remote terminal sites); see also *id.* at ¶ 34, n. 95 (discussing the three types of remote terminals deployed in SBC's network and the space limitations associated with each).

address other issues, such as technical interoperability of equipment, heat dissipation, power supply, and physical connectivity to the incumbent LEC's network.”<sup>69</sup>

Further, collocation at the remote terminal may entail uneconomic costs beyond the typical costs for collocation at the central office, and these costs vary greatly on a case-by-case basis. For example, many of the remote terminals in ACS' network have internal cross-connect panels or external cross-connect cabinets, in lieu of MDFs.<sup>70</sup> These cross-connect panels and cabinets may not accommodate the termination of tie cables from an adjacently located DLC. Indeed, the Commission has stated that only a point on the loop that may be accessed “*without* removing a splice case constitutes an *accessible* terminal.”<sup>71</sup> And, indeed, as a practical matter, when DLC's cross-connect panels or cabinets do not support the termination of tie cables to a collocated DLC, access is impossible unless GCI makes substantial expenditures to renovate ACS' facilities – costs not incurred when collocating to sites that employ an MDF. Hence, ACS' network design decisions often impose additional costs on GCI when GCI seeks to use its own switching and transport facilities, in combination with ACS' unbundled loops, to serve residential and small business customers. Imposition of collocation costs beyond what would be incurred where cross-connects may be completed on MDFs – or where collocation is simply impossible based on space constraints at the remote terminal – constitute economic and operational barriers to competitive entry. As such, requiring ILECs to provide direct access to unbundled loops at the central office – as the Commission mandated in the *Triennial Review Order* – alleviates these problems.

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<sup>69</sup> *Project Pronto Waiver Order*, 15 FCC Rcd 17521, 17530 (¶ 18, n.45).

<sup>70</sup> GCI Diagrams at 6-8.

<sup>71</sup> *Triennial Review Order*, at ¶ 254 (*emphasis added*).



Similarly, total service resale is not a substitute for UNE-based entry. It denies CLECs the opportunity for access charge revenue and USF support that is critical for a level playing field and for further and deeper facilities investment. Indeed, absent the availability of UNE-Pas a remedy to access otherwise inaccessible ILEC loops, incentives would exist for the ILEC to deploy concentrators and other devices to block CLEC access to loops in order to force the CLEC on to total service resale thereby winning back access charge revenue for the ILEC.

Moreover, as GCI explained in the *Triennial Review* proceeding, total service resale ties both the nature of GCI's retail service offerings and its costs to the ILEC's retail products and prices.<sup>72</sup> This puts substantial pressure on GCI to mirror ILEC price increases, reducing the likelihood of price competition or service repackaging.<sup>73</sup> UNEs, by contrast, are cost-based inputs that enable GCI to price its services independently from ACS' own retail pricing decisions.

GCI adds that "hairpinning" proposals do not always present a workable solution to this problem. In the *Triennial Review Order*, the Commission noted that Qwest had identified "hairpinning" as a solution to otherwise inaccessible loops service by IDLCs.<sup>74</sup> Hairpinning is a physical means of taking the circuit off the IDLC before it connects to fiber and becomes unsegregable to the CLEC facilities. Where this approach is technically feasible, then GCI agrees that it presents yet another alternative to provide access to the unbundled voice-grade loop. However, this approach does not work for all IDLC equipment, as the Alaska ILEC

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<sup>72</sup> See *GCI January 2003 Ex Parte Letter* at 5-6.

<sup>73</sup> *Id.*

<sup>74</sup> *Triennial Review Order* at n.855.

informed GCI in the first interconnection arbitration between the companies in 1997.<sup>75</sup> Where this or any other alternative means is not available, then the ILEC must provide the unbundled loop, in combination with unbundled switching (with associated signaling), and unbundled transport to provide access to the loop facility.

GCI emphasizes that access to UNE-P as it proposes here is not a request for access to unbundled switching as a stand-alone network element. In each of the examples GCI has discussed, it has deployed its own switching capabilities, but because the ILEC loop architecture blocks GCI access to the loop, the deployed switching cannot be utilized.<sup>76</sup> Therefore, the FCC must specify that pursuant to *Triennial Review Order* ¶ 297, ILECs must “present requesting carriers a technically feasible method of unbundled access” in the central office, not at the subloop. Additionally, where an ILEC cannot provide a CLEC with access to an unbundled loop in the central office, the FCC should specify that among the alternative “technically feasible method[s] of unbundled access” is the provision of access to the loop in combination with local switching, related signaling and common transport or UNE-P.

#### IV. TRANSITION MECHANISMS

In its Notice, the FCC asked parties to comment on additional transition mechanisms that may be necessary to help prevent service disruptions during cut-overs from UNE facilities to a

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<sup>75</sup> See *In the Matter of the Petition of GCI Communication Corp. for Arbitration under Section 252 of the Communications Act of 1996 with the Municipality of Anchorage d/b/a ATU Telecommunication for the Purpose of Instituting Local Competition*, Docket U-96-89, ATU Position on IDLC Delivered Loops (Nov. 12, 1996) (attached hereto as Exhibit 9).

<sup>76</sup> GCI notes that even if the issue were viewed from a switching impairment perspective, the requested result would still be appropriate. The use of non-multihostable concentrator devices constitutes an exceptional source of impairment. See generally NPRM at ¶ 11. Only the ILEC network architecture – not the lack of GCI facilities – impedes GCI’s access to the local loop at central office switch locations. A CLEC’s inability to access the loops provisioned in this manner, even with extensive switch deployments, is a quintessential form of impairment – the ILEC network configuration prohibits further facilities-based competitive entry to areas served by these devices.

carrier's own (or third-party) facilities, or for conversions to tariffed or other service arrangements.<sup>77</sup> In the event this Commission elects to adopt a transition mechanism during which CLECs may be required to discontinue unbundled switching (or other UNEs) under certain circumstances, the FCC should ensure that the terms of such a transition takes into account real network issues.<sup>78</sup>

First, if the FCC elects to adopt a transition plan that includes any form of a line cap, it is critical that the number of lines counted toward the cap must not include loops that are inaccessible to competitors because of IDLCs or non-multihostable concentration devices. For example, if the Commission required CLECs to transition from UNE-P once a CLEC serves a specified number of UNE-P lines out of central office, this obligation should not be assessed using – or triggered off of – any loops that are inaccessible at the central office due to the loop architecture. ILEC network decisions should not count against their competitors. The inclusion of inaccessible lines will only serve as an incentive for ILECs to make network architecture decisions that increase further the number of inaccessible lines.

Second, even with a transition plan, the availability of UNE-P must be maintained under certain circumstances regardless of the transition period. As described by GCI above, the remedy for the IDLC scenario where UNE-P must remain available as a remedy in order to access the unbundled loop is separate and distinct from any proscribed transition period. Thus, this remedy must be specifically excluded from any phase-out of UNE-P under a transition period for access to unbundled switching. Even in an all UNE-L environment, without the availability of UNE-P as a remedy to gain access to the ILEC loop, an ILEC could simply

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<sup>77</sup> NPRM at ¶ 11.

<sup>78</sup> *Id.* at ¶ 10.

increase the use of non-multihostable IDLCs to create a barrier to the competitive availability of UNE-L. The ongoing availability of UNE-P as a remedy serves as an important safeguard against such anticompetitive behavior and becomes even more critical as competitors increase reliance on UNE-L strategies.

Third, to be clear, the UNE-P remedy for access to the unbundled loop is certainly not GCI's first preference as a means for access to the unbundled loop. As described above, this approach does not permit GCI to use its own deployed switching facilities. Perhaps more importantly, it significantly reduces the CLEC's ability to offer a complete suite of services over the customer's copper loop. Today, when GCI serves a customer via a home-run copper loop, it can offer DSL service in addition to local and long distance, using its own electronics. All the ILEC has to do is lease the facility and keep the loop DAML free.<sup>79</sup> When the ILEC installs a DLC, however, and does not leave sufficient spare copper loops available to meet its obligation to provide a voice-grade circuit, all the remaining physical methods of accessing the voice grade loop deny the CLEC's opportunity to deliver DSL to its customers over the bare copper loop. These customers face cut-off and return to a world in which they lacked meaningful marketplace choices for their suite of services (including voice).

Recognizing that CLECs (and ILECs) today utilize home-run copper loops to provide voice grade and xDSL services, GCI urges the Commission to specify a reasonable transition period for a CLEC to adjust to a DLC (or comparable device) installation network change and develop alternative methods of providing DSL services to customers homed to the planned device. Specifically, in any case where the ILEC is planning a network change to install a DLC where it will not continue to provide the CLEC access to the voice-grade copper loop via home-

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<sup>79</sup> When the ILEC keeps or adds DAML devices (which can dampen interference for voice grade calls) to a clean copper loop, the DSL service does not function.

run copper loops,<sup>80</sup> then the ILEC must provide a twelve-month notice and transition period from public notice of the specific network change notification prior to disrupting the CLEC customer's DSL service.<sup>81</sup> This twelve-month period is consistent with the FCC's current rules on network changes for make-buy decisions,<sup>82</sup> and recognizes that the CLEC must have a reasonable opportunity to investigate and implement alternatives.

GCI is facing this critical issue today. If the ILEC – ACS – refuses to leave spare copper, GCI will have less than six months to find a technical solution to continue to provide existing business customers with the full suite of service they purchase from GCI.<sup>83</sup> These are customers whom GCI cannot serve with cable modems because cable plant does not pass their locations. The proposed transition period is necessary to secure and implement alternative arrangements to continue providing xDSL services to existing and potential customers served by the new DLC or other loop impairing device.

## **V. UNBUNDLING OF DEDICATED TRANSPORT FACILITIES AND HIGH-CAPACITY LOOPS**

In its Notice, the FCC invited parties to comment on the availability of specific network elements.<sup>84</sup> GCI provides the following information relevant to its access to dedicated transport and high-capacity loops as presented in the state case implementing the FCC's *Triennial Review*

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<sup>80</sup> To the extent that spare home-run copper loops are available, they must be made available to the CLEC on a nondiscriminatory basis. To that end, the FCC was clear in the *Triennial Review Order* that the "requirements for stand-alone copper loops apply to both copper loops that are in active service and those that are deployed in the network as spares. *Triennial Review Order* at ¶ 249. The FCC went on to state that "these requirements also include the obligation to condition the spare pair so that the requesting carrier may provide xDSL service." *Id.* at n. 746.

<sup>81</sup> Declaration of Gina Borland on Behalf of GCI ("Borland Declaration") (attached hereto as Exhibit 7) at ¶¶ 20-21.

<sup>82</sup> See 47 C.F.R. § 51.331(a).

<sup>83</sup> See Borland Declaration at ¶ 20.

<sup>84</sup> NPRM at ¶ 11.

*Order.* Overall, the data and analysis presented in the case before the RCA confirms the FCC's finding of impairment relative to these elements.

**A. Alaskan Evidence Demonstrates Continued Impairment for Dedicated Transport**

The court in *USTA II* remanded the issue of high capacity dedicated transport facilities back to the FCC finding not only that the Commission could not subdelegate its § 251(d) authority to state commissions but also doubting that a national impairment finding was justified on the record.<sup>85</sup> Based on GCI's experience in Alaska, the FCC's conclusions regarding transport elements were correct. Data from GCI's state case show that the FCC's proscribed analysis and criteria correctly support an impairment finding for these network elements. In the *Triennial Review Order*, the FCC required its impairment analysis for dedicated transport to be conducted on a route-by-route basis.<sup>86</sup> But in the state case before the RCA, there was no basis upon which ACS could meet any of the proscribed triggers -- self-deployment or competitive wholesale triggers<sup>87</sup> -- for reaching a finding of non-impairment on any route. While GCI does have fiber facilities between ACS central office locations and makes high-capacity fiber available under tariff,<sup>88</sup> the record in the Alaska case reflects that GCI is the only carrier unaffiliated with the incumbent to do so. ACS failed to identify any other provider that offers transport facilities between ACS wire centers or switches,<sup>89</sup> and discovery during the proceeding

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<sup>85</sup> *USTA II*, 359 F. 3d at 573-574.

<sup>86</sup> *Triennial Review Order* at ¶ 359.

<sup>87</sup> See *Triennial Review Order* at ¶¶ 359, 400. GCI notes that the continued availability of UNE transport may provide a solution for accessing customers served by those non-multi-hostable remotes, as described herein, through the use of enhanced extended links ("EELs").

<sup>88</sup> *Alaska TRO Case*, Response of GCI to RCA Order Requesting Data, R-03-7 (Mar. 19, 2004) (attached hereto as Exhibit 6) at 7 (Response to Question No. 22).

<sup>89</sup> Although ACS referred to another fiber provider in its state testimony, AFS fiber, nothing in the record indicated a single ACS route where both GCI and AFS are thought to provide transport. Moreover,

to other carriers identified no additional providers. Thus, the self-deployment and competitive wholesale triggers were not met on any route.

**B. Alaska Data Supports the FCC's National Finding of Impairment for DS1s**

In the *Triennial Review Order*, the FCC issued a national finding of impairment for DS1, which may be rebutted if the applicable trigger is met. Specifically, the FCC mandated that the state commission analysis must be conducted on a location-specific basis applying two federal triggers – the self-provisioning trigger and the competitive wholesale facilities trigger.<sup>90</sup> In Alaska, the RCA directed any party disputing the FCC's finding of impairment for these UNEs to “provide a prima facie case clearly identifying the customer location for which a finding of non-impairment is sought, all evidence in support of such a finding, and an identification of what triggers or other factors justify a finding of non-impairment.”<sup>91</sup>

In the *Triennial Review* case before the RCA, ACS did not even challenge the impairment finding for DS1 loops.<sup>92</sup> Simply stated, ACS made no attempt to demonstrate that any trigger had been met for this element because it could not. For those customers where a DS1 loop is required, GCI has no alternative but for ACS. And given that loops of this capacity are typically demanded by business customers, failure to provide access to these loops would foreclose GCI from offering services to a considerable market segment. From the state record, it is clear that no other alternatives – either actual or potential – exist, and the presence of a single

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ACS' general claims of fiber deployment do not demonstrate the potential for “competitive, multiple supply” of transport along any given route. Indeed, most of the facilities it mentioned are not transport facilities as defined for the purpose of unbundled network elements because they are not between two ACS switching centers, terminating in a collocation arrangement in the central office. (See *Triennial Review Order* at ¶ 406)

<sup>90</sup> *Triennial Review Order* at ¶¶ 328-329.

<sup>91</sup> *Alaska TRO Procedural Order* at 9.

<sup>92</sup> See *Alaska TRO Procedural Order* at 9.

self-provider – the ILEC – cannot be used to show general non-impairment.<sup>93</sup> ACS knew this and didn't even challenge DS1s. The FCC's finding of national impairment as to DS1s is thus supported by the data in Alaska.

**C. CLECs Should Continue to Have Access to High-Capacity Loops**

Similarly, GCI's experience also confirms that the FCC correctly made a national finding of impairment relative to DS3s and dark fiber loops as applied in Alaska. Again, in the *Triennial Review Order*, the FCC required its impairment analysis for high capacity loops to be conducted on a customer-by-customer basis applying the self-provisioning or competitive wholesale triggers. ACS challenged the impairment finding relative to DS3s and dark fiber. But once again, the relevant triggers could not be met. To meet the self-provisioning trigger ACS would have to show a customer location is identified as being served by two or more unaffiliated CLECs with their own loop transmission facilities at the relevant capacity level.<sup>94</sup> The competitive wholesale trigger is satisfied only where two or more unaffiliated competitive providers have deployed transmission facilities to the location and are offering alternative loop facilities to CLECs on a wholesale basis at the same capacity level.<sup>95</sup> In discovery before the RCA however, GCI was the only respondent to report any high-capacity loop services at limited customer locations.<sup>96</sup> As such, neither trigger can be satisfied. There are simply no other alternatives for DS3 and dark fiber sufficient to show that CLECs are not impaired without

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<sup>93</sup> Indeed, the FCC specifically stated that the self-provisioning trigger is met where a specific customer location is identified as being currently served by two or more unaffiliated competitive LECs with their own loop transmission facilities at the relevant loop capacity level. *See Triennial Review Order* at ¶ 329.

<sup>94</sup> *Triennial Review Order* at ¶ 329.

<sup>95</sup> *Id.*

<sup>96</sup> *See* GCI Discover Responses at 8 (Response to Question 24) and attachment GCI-8 (attached hereto as Exhibit 10).



access to ACS-provisioned high capacity loops. As illustrated from the Alaska case, the FCC's impairment finding relative to high capacity loops is correct.

## **VI. BATCH HOT CUT PROCESS**

The FCC requested that parties summarize state commission efforts to develop batch hot cut processes.<sup>97</sup> As the record in the state case before the RCA clearly demonstrated, the absence of workable batch cut processes has caused delays and contributed to customer outages that stymie CLEC efforts to serve customers via their own switching facilities. To remedy these problems, GCI urged the RCA to adopt a batch cut process<sup>98</sup> and highlighted the need for that process to include coordination, notification, and standards, and to prohibit order caps.<sup>99</sup> In GCI's experience, an established batch hot cut process – even in non-RBOC markets – are essential to ensure stability in the market for the CLEC and its customers, by creating a more seamless, predictable process for loop provisioning. To address this source of operational impairment, the FCC should order a default standard for batch cut processes that includes these key elements.

### **A. Deficient ILEC Practices Demonstrate Need for Batch Hot Cut Processes**

As noted in the *Triennial Review Order*, when a competitive LEC seeks to serve a customer via UNE loop, the loop must be physically disconnected from the incumbent's switch and moved to the competitor's switch. This transition is called a hot-cut, because the loop typically is in use or "live" when the work to move the loop occurs.<sup>100</sup> Therefore, close

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<sup>97</sup> NPRM at ¶ 15

<sup>98</sup> Declaration of M. Sue Keeling ("Keeling Declaration") (attached hereto as Exhibit 8) at ¶ 14.

<sup>99</sup> See Keeling Declaration at 3 and 15-23 and Declaration Exhibit MSK-1 (describes the GCI proposed batch hot cut process). GCI notes that the RCA did not issue any finding or conclusion on GCI's proposal or analysis prior to the stay of its state Triennial Review case.

<sup>100</sup> See *Triennial Review Order* at n.1294.

coordination between the incumbent and competitor is required to ensure that the customer does not experience prolonged outages as the work is being performed. As the FCC originally noted in the *Triennial Review Order*, the “potential for disruption of service to the customer...” is among economic and operational barriers caused by the cut over process.<sup>101</sup>

As demonstrated by GCI’s experience, CLECs are impaired without established batch cut processes. For GCI, delays in the order processing and provisioning process have caused long customer delays and outages, particularly for customers whose service is to be provisioned via UNE-L and require hot cuts.<sup>102</sup> Such delays in the provisioning of orders to switch customers from ILEC retail local service to CLEC facilities prevents customers from receiving the pricing and package of services they wanted from their carrier of choice in a reasonably timely manner and “prevent[s] [the CLEC] from providing service in a way that mass market customers have come to expect.”<sup>103</sup> Moreover, ILEC delays from the deficient hot cut volumes and methodology also impair a CLEC’s ability to provide facilities-based services to customers via its own switching facilities.<sup>104</sup>

As described by GCI’s experience, unreliable provisioning, slow processes, and order caps have denied, at times, benefits GCI reasonably believed would accrue from investing in facilities to provide local service.<sup>105</sup> To begin service in markets where GCI had not yet

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<sup>101</sup> *Triennial Review Order* at ¶ 459.

<sup>102</sup> See Keeling Declaration at ¶ 7 (identifying different order types requiring hot cuts).

<sup>103</sup> See *Triennial Review Order* at ¶ 459; see Declaration of Gina Borland (“Borland Declaration”) at 5. For GCI, such customer conversion delays by ACS resulted in over 200 informal complaints from consumers between July and September, 2002. See Borland Declaration at 8 (describing 2002 RCA investigation of 200 consumer complaints about processing and provisioning delays due to faulty hot cut practices); see also Keeling Declaration at ¶¶ 8-9 (describing specific instance of provisioning delays due to deficient hot cut practices).

<sup>104</sup> See Keeling Declaration at ¶ 8.

<sup>105</sup> Borland Declaration at ¶¶ 5-6.

deployed collocation facilities, GCI has initially served a customer using wholesale. GCI's business model, however, depends on moving these customers as quickly as possible and wherever possible to UNE-L service arrangements in which GCI provides the switching and transport.<sup>106</sup> Business customers may be exposed to interruptions and customers generally are exposed to safety risks if they experience outages and are unable to reach emergency assistance or receive vital information.<sup>107</sup> The lack of a reliable process can prevent a CLEC from maximizing its use of deployed switching facilities due to provisioning delays.<sup>108</sup> The CLEC relationship with potential customers is detrimentally affected when the CLEC cannot provide firm or satisfactory service due dates.<sup>109</sup> Implementation of a defined batch cut process would militate against deficient hot cut practices that create considerable delays and prevent a CLEC from maximizing use of its deployed facilities.<sup>110</sup>

These problems are exacerbated when order volumes increase, as would be the case if CLECs were required to undertake mass UNE-P to UNE-L conversions.<sup>111</sup> In GCI's case, when GCI rolled out service in Anchorage, some customers experienced delays of three to six months.<sup>112</sup> Delays of five weeks and more were the norm when GCI initiated service in Juneau and then Fairbanks, forcing GCI to stage its service roll-out in Fairbanks by zip code.<sup>113</sup> This correlation between increases in orders and an inability to timely provision orders demonstrates

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<sup>106</sup> *Id.*

<sup>107</sup> Keeling Declaration at ¶¶ 17, 19, 22.

<sup>108</sup> Borland Declaration at ¶¶ 7, 14-16.

<sup>109</sup> *Id.* at ¶ 8, 13.

<sup>110</sup> *See Triennial Review Order* at ¶ 459.

<sup>111</sup> Keeling Declaration at ¶ 8.

<sup>112</sup> *Id.*

<sup>113</sup> *Id.*

the need for a batch cut process would be especially important should the Commission eliminate unbundled switching as a stand-alone UNE.

**B. The Commission Should Adopt Default Batch Cut Process Requirements.**

GCI's particular set of circumstances underscore the necessity of requiring a default batch cut process especially where, as is the case in Alaska, there has been no section 271 process in which a state commission considered and approved a batch cut process as part of an application to enter the long distance market and where the ILEC does not have electronic provisioning mechanisms in place. With a workable default batch cut process in place, loop swings can be maximized and customer outages (and thus trouble tickets) can be minimized.<sup>114</sup>

**Coordination and Notification.** Specifically, the Commission should include prior coordination and subsequent notification as a required component of any batch cut process.<sup>115</sup> The FCC found that such coordination and notification are typical, whereby ILECs will pre-wire circuits on the central office facilities, verify the presence of dial tone, and communicate with competitive LECs regarding problems encountered on a line-by-line basis, but this has not been ACS' standard operating procedure. To standardize this process, the FCC should require ILECs to notify the CLEC technician no later than 30 minutes in advance to coordinate the hot-cut regarding the set of lines to be converted.<sup>116</sup> Prior coordination should be performed and repeated for every batch of hot cuts. Based on ACS network configuration and the number of lines in Anchorage, Fairbanks, and Juneau, respectively, GCI recommended to eh RCA that each batch consist of ten customer orders (without regard for the lines per customer).<sup>117</sup> In GCI's

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<sup>114</sup> See e.g. Keeling Declaration at ¶ 20.

<sup>115</sup> *Id.* at ¶¶ 16-23.

<sup>116</sup> *Id.* at ¶¶ 17-18.

<sup>117</sup> *Id.* at ¶¶ 24-25.

view, these parameters are sufficiently tailored to take into account the different characteristics of non-RBOC local service areas and to address the evidence that a better process was required.

Subsequent notification should be another required component of a batch cut process when the planned series of jumper swings is completed, to include validation and confirmation of a completed/successful hot cut before the ILEC closes the service order.<sup>118</sup> The absence of, or inconsistent adherence to, notification and coordination tasks as part of the batch cut process will increase the opportunity for customer outages and disruptions in the hot cut process, as well as the occurrence of unsuccessful hot-cut of loops between carrier switches.<sup>119</sup>

**No Order Caps.** The Commission should expressly prohibit caps on location or per day loop provisioning orders.<sup>120</sup> Order caps or minimums impose unnecessary delays in provisioning loops and the FCC should state that such arbitrary parameters are prohibited.<sup>121</sup> GCI's customers suffered under some of the greatest backlogs and delays during time periods where ACS imposed arbitrary limits on daily order processing.<sup>122</sup>

**Metrics.** Performance metrics are a necessary component for hot cut completions.<sup>123</sup> Without requirements upon parties to negotiate or arbitrate appropriate standards, ILECs have little incentive to provision loops in a timely, nondiscriminatory manner. This is especially the case in markets where electronic loop provisioning is not available and where such standards have not been developed as part of a 271 processes.

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<sup>118</sup> Keeling Declaration at ¶¶ 19-20.

<sup>119</sup> Keeling Declaration at ¶¶ 19-20; 25.

<sup>120</sup> Borland Declaration at ¶ 17.

<sup>121</sup> *Id.*

<sup>122</sup> *Id.* at ¶ 18.

<sup>123</sup> Keeling Declaration at ¶ 26.

In sum, the FCC should, at a minimum, incorporate these key elements -- requirements for coordination, notification, and performance standards, and the prohibition on any order caps -- as part of the ILEC batch hot cut process. Without these necessary components, customers are at a risk for service delays and outages with the CLEC exposed to unpredictable provisioning, delays business plan implementation, and loss of business due to customer dissatisfaction with processes predominately within the ILEC's control.

## VII. CONCLUSION

Based on the foregoing, GCI respectfully requests that, pursuant to paragraph 297 of the *Triennial Review Order* and the ILEC obligation to “present a requesting carrier a technically feasible method of unbundled access” to a voice grade loop, that the FCC clarify two aspects of that obligation. First, the FCC should clarify that ILECs must provide a CLEC unbundled access to a voice-grade loop in the ILEC central office (i.e. access to the whole loop rather than a subloop). Second, where an ILEC cannot provide a CLEC access to a voice-grade loop in the ILEC central office the FCC should specify that among the alternative “technically feasible method[s] of unbundled access” is the provision of access to the loop in combination with local switching and related signaling and common transport. Additionally, as the data herein supports, the FCC’s finding of impairment and analysis were consistent with the data presented in the *Alaska Triennial Review* case with respect to the provision of unbundled access to dedicated transport and high capacity loops. Finally, GCI urges the FCC to adopt a default batch hot cut process that includes coordination, notification, and a performance metric as its key components.

Respectfully submitted,

By: /s/\_\_\_\_\_

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